

Penobscot Valley Star Gazers

An Astronomical Society of Central Maine

<http://www.gazers.org>

September 2007

CCD Pictures

Monday, September 10, 2007 will bring with it the next 6:30 p.m. meeting of the PVSG in room 310 at John Bapst Memorial High School. This month we will be visited by astrophotographer Paul Burke, who will tell us about his methods for doing color CCD imaging. His presentation will include his imaging techniques (telescopes, mount, CCD camera, narrow band filters, etc.). A lot of his talk will be about how he processes his pictures, which is the key (he says) to good CCD images. For a preview of his work visit <http://www.burkesobservatory.com/>.

Thanks for last month's program go to Carolyn for sharing her adventure in Hawaii with us.

High Living

August 13, 2007



August 2007

The meeting started at 6:38 PM. There were 13 members present and one guest, who became a member by the end of the meeting. Scott brought the meeting to order and decided we would start with Carolyn's talk in the hopes that Wade would make it by the time Carolyn finishes.

Carolyn reported that she and her husband flew to the island of Oahu and spent 5 days there before flying on to the Big Island. She showed us pictures of the many things she saw and visited. To get to the top of Mauna Kea you need a four wheel drive vehicle. Carolyn rented one but it broke down on her prior to her attempt to get to the summit. She and her husband had to share a ride with another couple to the summit.

Carolyn reported that Mauna Kea, which is the highest spot in Hawaii, did not begin to see large telescopes on the summit until the 1960s. As more telescopes were placed on the mountain and others were planned, the natives of the island, who held the mountain to be sacred, and the

astronomers began to clash. Now there is a master plan for the use of the mountain. Astronomers who want to use the mountain now have to carefully plan what they can place in the limited space they have left. At the present time there are 9 optical tubes, 1 infrared and 3 sub millimeter telescopes on the summit.

The summit of Mauna Kea is 13,769 feet above sea level. There is 40 % less atmosphere at the top.

This makes for better viewing, but there are problems — mainly the temperature and possible altitude sickness. On the trip to the summit they stopped at about 9,000 feet for a preview of what they would find at the top and to help them adjust to the altitude. On the way to the top another vehicle broke down. Carolyn got to go inside one of the Keck buildings. The Keck telescope is made up of 36 one-meter mirrors to make it functionally a ten-meter telescope. You can go to this web site to find out more:

<http://www.ifa.hawaii.edu/mko/>.

Before she could see much more it was decided that the vehicle she was traveling in would have to re-

On the Schedule

(Items Subject to Change)

PROGRAMS

October: Ralph, Questar Telescope and its history.

November: Dave, 6 Numbers

December: Wade, Trip to Stel-lafane

STAR PARTIES

September 8 (co): Nature Conservancy, 9 pm

September 14 (co): Challenger Center, Bangor, 7 to 8:30 pm

September 15 (rs): Challenger Center Open House, Bangor

First date is primary, second is rain date; ? Tentative; (rs) rain or shine; (co) clear only

Dues are Due October 1st

Regular \$15.00

Family \$22.50

Junior \$7.50



Pay the treasurer at the meeting or send it to him.

turn to a lower altitude as the wife of the driver she was traveling with became sick because of the altitude. There were not enough vehicles to assure her a ride down if she stayed. Carolyn had handouts to show us; they included a map of the mountain, brochures on fauna and highlights of the mountain, altitude sickness, and a list of telescopes on the mountain. Carolyn came away impressed with what she had seen and felt that we had not seen to the end to what ground based telescopes could show us.

Midway through Carolyn's presentation our president Wade arrived and at the completion of her speech he took over the meeting. In no particular order we then had the rest of the meeting.

Dave reported that he had been to the Marshall Point Lighthouse at Port Clyde and found a 16" mirror mount from a Russell Porter telescope. Wade reported that for only \$ 37,000 you too could own a reproduction of a Russell Porter garden telescope. Wade also reported that he went to Stellafane with Peter. Doug also went to Stellafane. This was Wade's first trip to Stellafane when it didn't rain. Wade was able to look through a 30" Obsession, two Alvin Clark refractors and various other telescopes. While Wade was there he met Real Manseau who had built a reproduction of Newton's telescope. Real gave a DVD to Wade of his building of the reproduction. He had arrived at Stellafane too late to show it there. We then viewed the DVD. Wade went to the featured talk by Tim Parker who was in on the decision making on where to place the two rovers that are currently operating on Mars.

The one visitor we had at the meeting was David. David introduced himself and by the end of the meeting he had filled out the paperwork to become a member and paid his dues. Welcome David.

Carolyn reported that she was not hosting the club's Sunfest at her home as listed in the last newsletter. After that small clarification, and no other error reported or caught, the Secretary's report was accepted.

Old Business: Wade reminded us about the Star Party in Edmund coming up on August 17th to the 19th. Carolyn says that anyone coming down to her house for the star party should let her know as she will be spending some time in Machias for the Blueberry Festival. Dave and Wade went to the old folk's home in Brewer and had an interesting time as all the residents have some form of Alzheimer's. They started out with four residents and at one time had 10. The home would also like a star party at some time in the future. Wade was honored at the Windover Arts Center for his past work there. On the visit when he was honored he took some of the students who had been working with digital cameras out to take pictures of the

E-mail Excerpts

Club news sent by e-mail since the last meeting. Simply for the record and for those for whom we have no e-mail addresses.

Challenger Center

...We're planning an evening event on Friday, Sept 14 and family open house the afternoon of Sat, Sept 15 at the Challenger Center. I see you've already had your August meeting, but do you think there would be interest in having a small Star Party on the night of the 14th (say 7:00-8:30, sunset at 6:15)? And if you wanted to host a table on Sat afternoon as well, we'd welcome you. Let me know. I'm going to advertise the events of the 15th soon, but can leave it open ended enough to fill you in as you are able to plan. Thanks! Annette L. Brickley, Professional Development Director, Challenger Learning Center of Maine

I will pass this on to the entire club....Perhaps any club member interested could contact Wade to let him know of their availability. Sounds like a good 2 days of events!!! Carolyn

This sounds like an excellent opportunity to utilize a Night Sky Network toolkit. Wade

Insurance

I have received the final notice from the insurance. My preliminary research shows that \$500 is most insurance companies lowest premium. I have not received a packet from the Astronomy League yet. Should we pay the \$400 to keep this insurance for another year, giving us more time to find an alternative? Wade

Have you contacted Charlie from the downeast group for any insurance info? I suppose that we should pay it. Can we get the SAD 22 (and some other group) taken off the policy? DC

Hi Charlie, Wade here from the Penobscot Valley Stargazers. Hope all went well at the Maine Starparty. Thought I was going to be able to attend, but was outvoted by my family members who chose the Highland Games instead.

Anyway, the question that I have relates to what your club dues are, and fees and benefits relating to the Astronomical League; i.e. insurance. Our club insurance premium appears to have dou

night sky. Wade was impressed with the students' results.

New Business: Bill reported that subscription prices to *Astronomy* magazine are the same as last year, \$34 for one year and \$60 for two years. Our insurance policy with MMG Insurance Company was discussed. The amount for the policy last year was \$250 and this year it is \$400. Wade is looking into what can be done to decrease the premium. Wade also reported that he found out that we were one of the few clubs who go to different locations to have Star Parties, most clubs have people come to them. The Bangor Land Trust wants us to have another Star Party on their land on August 25th from 9 PM to midnight. Rain date the 26th. (This never took place as the weather was bad I believe it has been rescheduled to the 8th of September.) Anyone who can help out please contact Wade. The club received a thank you note from Reed Brook Middle School in Hampden for the Star Party we held there last November. There was discussion that the club should look into finding a new source of t-shirts with the club logo on them. We would like to find a location that would have our logo on file so a member could walk in and have a t-shirt made up on the spot. Anyone willing to work on this project please contact Wade.

The meeting broke up at about 8:45.

Ralph

Future Speakers and Meetings: October 8th - Ralph will speak about the Questar Telescope and its history.

November 12th - Dave will speak on 6 numbers

December 10th - Wade will speak on his trip to Stellafane.

Star Parties: None by Club members.

Bangor Land Trust - September 8th 9:00 PM to Midnight

Challenger Center - September 14th 7:00 PM to 8:30

Challenger Center Open House - September 15th

excerpts continued

bled, and we are interested to see if association with the Astronomical League would be beneficial to us. I have been to the League's website, but didn't truly understand their pricing. Is it \$7.50 per club member, plus a single \$10.00 fee or is it a total of \$17.00 per club member? Also, does each club member then have to join the League for an additional \$20.00? Thanks for your input, Wade

The Maine State Star Party went well. We had 2 nights of clear weather. I hope next year we can bring in more club members from around the state. I have attached a copy of the AL dues sheet. Depending on the % of members that sign up for the league, it should be \$7.50 per person and a \$10 fee for the club. Charlie

Conservancy Star Party

The star party for the Nature Conservancy didn't happen due to weather. They would like to reschedule for Saturday, Sept 8. If you would be willing to attend, let me know. Thanks, Wade

Google

For those who use google earth they have now added a new product called 'Sky in Google Earth'. One of the write ups is here. http://www.space.com/news/070822_google_sky.html. Ralph

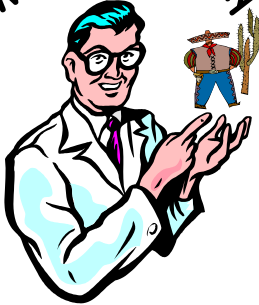
Audrey

Hi All! If I can get up early, I may be able to see them [Aurigids] from Corinth, Maine!!! But I'm not sure I'll be up that early because my flight gets into Bangor, Maine at 11 p.m. the evening before! Would sure be nice though!

Wish I could have time to get together with some of you, but I don't have that much time. Hopefully, the next time I come, I can stay longer. Haven't accumulated enough vacation time yet!...Have enjoyed following along with e-mails about your activities. Do miss being with you all - but I'll join you sometime!...Take care! Clear Skies! Audrey

Meet Calvera

Mr. Astronomy



If you are a fan of the movie “The Magnificent Seven” you might remember the villain in the movie was named Calvera. Now there is a Calvera in the sky and it is the nemesis of the seven previously known neutron stars not associated with a supernova remnant collectively known as “The Magnificent Seven.”

From 1990 to 1999 a German-American satellite known as ROSAT cataloged 18,000 X-ray sources. After comparing all these sources to known objects in visible light, infrared light, and radio waves Robert Rutledge of McGill University in Montreal, Quebec realized one object cataloged as IRXS J141256.0+792204 was only an X-ray source. His group and their partners at Penn State University had the NASA Swift satellite along with the Gemini North Telescope in Hawaii and the Chandra X-ray Observatory observe the object. They found it was only an X-ray emitting object and it was shown not to be associated with any other object down to a very faint magnitude. The Chandra observation showed it to be a very small point-like object consistent with the definition of a neutron star.

Calvera does not fit exactly any other type of known neutron star so it is either an unusual type of neutron star or a new type. It is also very bright and relatively close to Earth possibly as near as 250 to 1,000 light years away. It may be the closest neutron star. The team plans to observe Calvera for a longer time with Chandra to determine if it pulsates in X-rays and to measure its spectrum. They also plan to observe for a longer time with radio telescopes to search for radio pulsations.

Mr. Astronomy